

REMARKS

Claims 9, 10, 13, and 15 were rejected. Claims 11, 12, and 14 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. Claims 9-15 are now pending. The above amendments and the following remarks are considered by Applicants to overcome each rejection raised by the Examiner and to place the application in condition for allowance.

*Rejections of claims 9, 10, 13, and 15 pursuant to 35 U.S.C. § 102(b) (Hiraga)*

The Examiner rejected claims 9, 10, 13, and 15 pursuant to 35 U.S.C. § 102(b) as being anticipated by U.S. Pat. No. 6,560,033 to Hiraga (“Hiraga”).

Hiraga discloses an objective lens for a microscope. Hiraga, however, does not disclose a collector assembly or an apochromaticizing adapter assembly. The Examiner contends that Hiraga’s Figure 2 discloses these limitations—specifically, that G1 and G2 disclose a collector assembly, and that G3 discloses an apochromaticizing adapter assembly. G1-G3, however, are merely lens groups that help form Hiraga’s objective lens.

The specification for the instant application describes the collector as follows:

a collector which comprises a plurality of lenses is used in imaging optical devices, particularly microscopes, for magnified imaging of the light source in the aperture diaphragm of a condenser and for illuminating the image field.

(Application ¶ [0003].) Regarding the apochromaticizing adapter assembly, the specification provides

The apochromaticizing adapter assembly substantially reduces the chromatic aberration of the collector assembly and accordingly achieves the high aperture required on the lamp side for achieving the desired excellent efficiency.

(Application ¶ [0007].) These collector and apochromaticizing adapter assemblies are not disclosed by an objective lens arrangement, as an objective lens is simply a lens for receiving the first light rays from an object being observed. For these reasons, Hiraga does not anticipate independent claim 9 or dependent claims 10-15, and therefore Applicants respectfully request withdrawal of the rejection.

16. (previously presented) The optical system according to claim 9, further comprising the following parameters:

Assembly	Surface	Radius r	Thickness d	Refractive index n <sub>e</sub>	Abbe Number v <sub>e</sub>	Diameter
Adapter	a	130	5	1.552320	63.45999	27.38334
	b	-24	0.2			27.38454
	c	-24	3	1.647690	33.849998	26.79942
	d	24	0.2			26.76505
	e	24	5	1.552320	63.459999	27.77575
	f	-130	10			27.75754
Collector	g	25.119	5.8	1.522490	59.480000	28.39285
	h	-54.247	0.3			28.24928
	i	12.232	7.2	1.458464	67.821443	22.63967
	k	141.25				22.56214

*Rejections of claims 9, 10, 13, and 15 pursuant to 35 U.S.C. § 102(b) (Sharma)*

The Examiner rejected claims 9, 10, 13, and 15 pursuant to 35 U.S.C. § 102(b) as being anticipated by U.S. Pat. App. Pub. 2004/0109238 to Sharma (“Sharma”).

Similar to Hiraga, Sharma discloses an optical arrangement for a microscope objective, and therefore does not disclose the claimed collector and apochromaticizing adapter assemblies.

The Examiner contends that Sharma’s Figure 3 discloses these limitations—specifically, that 24 and 27 disclose the collector assembly, and that 21-23 disclose the apochromaticizing adapter assembly. But similar to Hiraga, the elements of Sharma cited by the Examiner merely disclose lens elements that form part of a microscope objective. These elements do not disclose the claimed collector assembly or apochromaticizing adapter assembly described above. For these reasons, Sharma does not anticipate independent claim 9 or dependent claims 10-15, and therefore Applicants respectfully request withdrawal of the rejection.

An early action on the merits of these claims is respectfully requested.

Respectfully submitted,

Eugene LeDonne  
Reg. No. 35,930  
Joseph Miller, III  
Reg. No. 61,748

REED SMITH LLP  
599 Lexington Avenue  
29<sup>th</sup> Floor  
New York, NY 10022  
(P) 212-521-5400

Attorney for Applicant